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10/521,688	08/10/2005	Christoph Nemmaier	P04,0367	1463

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EXAMINER
HON, MING Y

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _12 May 2009_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _27-38_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _27-38_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _18 January 2005_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
       1.☒ Certified copies of the priority documents have been received.
       2.☐ Certified copies of the priority documents have been received in Application No. _____.
       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 29, 2009 has been entered.

Response to Arguments

Applicant's amendment and supplemental amendment filed on April 29, 2009 and May 12, 2009 is acknowledged. Currently Claims 27-38 are pending. Claims 27, 30-33, and 38 has been amended.

Applicant's arguments with respect independent claims 27 and 38 have been considered but are moot in view of the new ground(s) of rejection. Amended claims 27 and 38 results in a different scope than that of the originally presented Claim 27 and 38 respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 27-31, 33-34, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable by Bernklau-Halvor USPN 6782495 and further in view of Koike et al. US2002/0098207 hereinafter referred to as Koike.

As per Claim 27, Bernklau-Halvor teaches a method for error handling in a printer or copier, comprising the steps of:

transmitting the detected error states to a coordination module which receives them; storing said received error states at a storage associated with said coordination module where combined they form a temporally successive error state pattern; (Bernklau-Halvor, Column 2, Lines 27-29, the data consists of a set of print diagnostic data which consists of multiple components. The set is considered an error state pattern. Sample Usage Data starting on bottom of Column 5 to top of Column 11, displays a printer log of what occurs such as paper jam along with the status of inks and paper which would require multiple detectors since these components occur in different locations in the printer.)

evaluating the stored error state pattern by the coordination module; (Bernklau-Halvor, Figure 1, Component 13 located in support server, Component 10)

for said evaluation, said coordination module comparing the stored temporally successive error state pattern with predetermined error state patterns, each predetermined pattern defining a sequence of error states, and determining at least one error type identifying said causative error; and implementing a corrective action by the coordination module dependent on the error type. (Bernklau-Halvor, Column 2, Lines 40-45)

Bernklau-Halvor does not explicitly teach providing a plurality of separate monitoring units each located in a different device component of the printer or copier, each monitoring unit detecting a respective error state represented by a respective error signal from said respective monitoring unit of the printer or copier created by a single causative error; However Koike teaches it. (Koike, Paragraph[0014])

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Koike into Bernklau-Halvor. Bernklau-Halvor teaches a printer log that contains log of errors such as paper jam and status of inks. To effectively monitor at least these two aspects requires various monitoring units that Bernklau-Halvor did not explicitly mention. Koike teaches the use of multiple detectors such as paper detector and ink detector to monitor the internal functions of a printer. These multiple detectors will allow the printer log of Bernklau-Halvor to be accurate and complete.

Therefore it would have been obvious to one of ordinary skill to combine the two references to obtain the invention in Claim 27.

As per Claim 28, Bernklau-Halvor in view of Koike teaches a method of claim 27 wherein said corrective action comprises providing at least one corrective measure to the printer or copier. (Bernklau-Halvor, Column 11, Lines 29-33)

Analysis is analogous to that made in Claim 27.

As per Claim 29, Bernklau-Halvor in view of Koike teaches a method of claim 27 wherein said corrective action comprises providing an error message. (Bernklau-Halvor, Column 11, Lines 29-33)

Analysis is analogous to that made in Claim 27.

As per Claim 30, Bernklau-Halvor in view of Koike teaches a method of claim 28 wherein a plurality of corrective measures are provided by the coordination module dependent on the error type. (Bernklau-Halvor, Column 11, Lines 29-33)

Analysis is analogous to that made in Claim 28.

As per Claim 31, Bernklau-Halvor in view of Koike teaches a method of claim 27 wherein said corrective action comprises providing both at least one corrective measure and at least one error message by the coordination module dependent on the error type. (Bernklau-Halvor, Column 11, Lines 29-33)

Analysis is analogous to that made in Claim 27.

As per Claim 33, Bernklau-Halvor in view of Koike teaches a method of claim 27 wherein information about the respective error type of temporally successive error states that can be automatically remedied are stored at least in one error storage of the coordination module. (Bernklau-Halvor, Sample Usage Data starting on bottom of Column 5 to top of Column 11, for the usage profile to contain data along with errors that are determined in the log)

Analysis is analogous to that made in Claim 27.

As per Claim 34, Bernklau-Halvor in view of Koike teaches a method of claim 27 wherein temporally successive error states transmitted up to a shut down of the printer or copier are evaluated with aid of a predetermined error evaluation algorithm. (Bernklau-Halvor, Sample Usage Data starting on bottom of Column 5 to top of Column 11, for the usage profile to contain data, the apparatus must be on. The predetermined error evaluation is the Rules engine, Column 11, Lines 27-31)

Analysis is analogous to that made in Claim 27.

As per Claim 36, Bernklau-Halvor in view of Koike teaches a method of claim 27 wherein the printing or copying event is ended after the transmission of the temporally successive error states, and all of the error states transmitted up to the ending of the printer or copier copying event are stored in the storage and used for the evaluation. (Bernklau-Halvor,

Sample Usage Data starting on bottom of Column 5 to top of Column 11, for the usage profile to contain data or log of activities. The predetermined error evaluation is the Rules engine, Column 11, Lines 27-31)

Analysis is analogous to that made in Claim 27.

As per Claim 38, Claim 38 is claiming a device for error handling in a printer or copier executing the steps as claimed in Claim 27. Therefore arguments and analysis are analogous to that claimed in Claim 27.

Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bernklau-Halvor USPN 6782495 and further in view of Koike et al. US2002/0098207 hereinafter referred to as Koike as applied to Claim 27 and further in view of Chiba USPN 6665088.

As per Claim 32, Bernklau-Halvor in view of Koike teaches a method of claim 27. Bernklau-Halvor in view of Koike does not explicitly teach wherein the controller is connected with a host system, whereby the controller only registers with the host system causative errors that cannot be corrected automatically; However Chiba teaches it. (Chiba, Column 13, Lines 29-54 and Figure 10; a error occurred and detected and the solution is automatically implemented if the condition is satisfied, the error would need to access data from the host but not inform the host of the error by going through a error identification process)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Chiba into Bernklau-Halvor in view of Koike. Bernklau-Halvor in view of Koike teaches an error detection process that involves identifying the error and provided solutions to the user on how to resolve the error. Not all errors need user intervention to resolve. Certain errors such as an underrun error as discussed by Chiba would have an obvious solution of resending the data again. The consultation of an error database

would be unnecessary and lead to inefficient operation of the system. Chiba teaches a beneficial addition to Bernklau-Halvor in view of Koike.

Therefore it would have been obvious to one of ordinary skill to combine the three references to obtain the invention in Claim 32.

Claims 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bernklau-Halvor USPN 6782495 and further in view of Koike et al. US2002/0098207 hereinafter referred to as Koike as applied to Claim 27 and further in view of Parry USPN 6666594.

As per Claim 35, Bernklau-Halvor in view of Koike teaches a method of claim 27. Bernklau-Halvor in view of Koike does not teach wherein dependent on the error type, the printer or copier is at least one of automatically restarted, an automatic start is prevented, and a signaling of the error to a subordinate controller occurs. However Parry teaches it. (Parry, Figure 3, Path from Component E3 to E7, signaling of the error is equivalent to sending the error to the controller))

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Parry into Bernklau-Halvor in view of Koike. Bernklau-Halvor in view of Koike teaches the ability to initiate a restart given certain conditions are met. Parry teaches the ability to send the error to the controller thus stopping the restarting from occurring since conditions weren't met. Parry and Bernklau-Halvor in view of Koike are in the same endeavor of error detection and error resolution involving printer/copier errors.

Therefore it would have been obvious to one of ordinary skill to combine the three references to obtain the invention in Claim 35.

As per Claim 37, Bernklau-Halvor in view of Koike teaches a method of claim 27. Bernklau-Halvor in view of Koike does not explicitly teach wherein the stored temporally successive error states are erased in the storage after the evaluation of the temporally successive error states; However Parry teaches it. (Parry, Figure 3, Components E1, E2, E3, and E4; the errors detected are sent to a memory where it is stored and evaluated. Memory modules have limited space and therefore when it reaches its limit will delete the errors to reallocate the memory for more errors)

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of Parry into Bernklau-Halvor in view of Koike. It is well known in the art that memory is not limitless, at a certain point the error log will run out of memory to store more information thus erasing is the only option to maintain a log. Parry and Bernklau-Halvor in view of Koike are in the same endeavor of error detection and error resolution involving printer/copier errors.

Therefore it would have been obvious to one of ordinary skill to combine the three references to obtain the invention in Claim 37.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MING HON whose telephone number is (571)270-5245. The examiner can normally be reached on Mon- Fri 7:30 to 5:00 EST; 1st Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571)272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. H./
Examiner, Art Unit 2625

/Mark K Zimmerman/

Supervisory Patent Examiner, Art Unit 2625